

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-002371**Date Inspected:** 21-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coating Inspection**Bridge No:** 34-0006**Component:** Office, OBG 7CE, East Tower Lift #1, OBG 7**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**Office**

Attend to report writing and project documentation and upload backlog of reports onto PMIV.

**OBG 7CE**

Base Metal surfaces of the external areas were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. Profile amplitude was 78-81um and Chloride values were 10-20us/cm.

**East Tower Lift #1**

Previously abrasive blasted and undercoated surfaces were washed and de-greased in accordance with SSPC SP-1 from 0-3M +/- for the installation of additional stiffeners. Skins A, B, C, D, E were areas worked on. These Stiffeners were previously undercoated with ZPMC "Shop Primer" 65 total pieces require installation. Of the (65) pieces presented for Inspection by ZPMC (11) pieces were abrasive blasted and rejected by ABF QA/QC personnel for fabrication defects and require re-blasting after amendment.

**OBG 7AW**

Testing was performed on the External Undercoated surfaces previously coated with Interzinc 22. MEK, Pencil Hardness and Quarter rub tests were in general compliance with the contract documents and Interfine 979 "Mist" coat was applied after the Faying surface areas were masked off to prevent overspray contamination of Bolted connection areas.

**Lift 1 West**

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## SOURCE INSPECTION REPORT

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Internal repairs were performed via abrasive blasting previously undercoated and damaged areas and re-application of Interzinc 22 performed. Concurrent with this work Faying surfaces and bolted connection areas were also repaired and re-coated with Interzinc 22.

### OBG 7BE

Internal undercoated surfaces were tested for adhesion and all testing performed was in excess of specified value of 4Mpa with the exception of one(1) area. An additional dolly was affixed for a retest at a later date adjacent to the failed area.

### West Tower Lift #1

This tower shaft was raised for a horizontal position and placed in a vertical position for trial fitting. The entire external surfaces of Skins A, B, C, D, E are currently coated with Gray Shop Primer.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

### Summary of Conversations:

No relevant conversations on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (858) 699-9549, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Lumley,James	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

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